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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SCIENTIFIC-ATLANTA, INC. INTELLECTUAL PROPERTY DEPARTMENT 5030 SUGARLOAF PARKWAY LAWRENCEVILLE, GA 30044			SHANG, ANNAN Q	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/481,155	<b>Applicant(s)</b> RODRIGUEZ ET AL.	
	<b>Examiner</b> Annan Q. Shang	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 10-14, 16, 37-47, 49-51, 54, 57, 58 and 60-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 10-14, 16, 37-47, 49-51, 54, 57, 58 and 60-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 6/28/06 have been fully considered but they are not persuasive.

Claims 1-2, 10-14, 16, 37-47, 49-50, 54, 57-58, 60-62 and 65 stand rejected under 103(a) as being unpatentable over **Burke et al (6,134,223)** in view of **Hendricks et al (5,600,364)**. Claim 3 stand rejected under 103(a) as being unpatentable over Burke in view of Hendricks and further in view of **Boursier et al (5,910,815)**. Claims 51 and 63-64 stand rejected under 103(a) as being unpatentable over Burke in view of Hendricks and further in view of **Sonesh et al (6,614,783)**. Claim 66 stand rejected under 103(a) as being unpatentable over Burke in view of Hendricks and further in view of **Kinney et al (5,808,662)**.

With respect to claims 1-3, 10-14, 16, 37-47, 49-51, 54, 57-58 and 60-65, applicant discusses a few columns cited in the office action and states that "...text within column 4 merely discloses the existence of a video access device providing audio/video telephony and conferencing services over an HFC network. There is no description about the capabilities of the video access apparatus that related to processing CATV signals for television programs. The portion of the text within column 5-column 6 discloses the capabilities of the station (105), which includes the combiner (104) and not the capabilities of the video access apparatus...there is also insufficient support for the Examiner to assert that the video access apparatus process television programs. Although this paragraph infers that a movie may be received from a CATV network and

watched simultaneously in a picture-in-picture format along with images from a monitoring camera, this is still devoid of any inference to or explanation as to how the video access apparatus would process television programs..." (see page labeled 12+ of applicant's Remarks).

In response, Examiner disagrees. Examiner notes applicant's arguments, however, as discussed in the office action, Burke discloses in figs.1-3 and 13-18) a Primary Station 'PS' 105, which receives PSTN or ISDN or any combination of telecommunication networks, and CATV video services 102, and where the PS-105, multiplexes, combines, encodes, etc., telephony signals and CATV signals and transmitting over HFC transmission medium 103 (col.4, lines 50-col.5, line 30, col.5, line 53-col.6, line 23 and col.25, line 4-col.28, line 1+). As also discusses in the office action, Burke further teaches in these cited columns, different video access apparatus 'VAA' 110, 150, 750, or 850 (a user terminal apparatus), which receives the data stream (compressed digital data, col.10, line 53-col.11, line 67) via the HFC communication channel 103, processes these signals (CATV/telecommunication signals) and outputs to multiple display units. The diagrams figs.1+ clearly illustrates the user terminal or VAA-110, 150, 750, or 850, receiving data stream from communication channel 103 and processing these signals and displaying video signals accordingly on the user display unit(s). Furthermore Burke teaches that VAA includes CATV RF Transceiver 245, other processing units, such as processor arrangement 190 or 260, in the form of a single IC or multiple ICs with RAM and ROM to receive the data stream via the HFC network, processes the digital data stream and display the videophone signals and television

signals, movie accordingly (col.8, line 51-col.9, line 41, line 58-col.10, line 36 and col.11, line 49-67). Examiner is lost, because it appears applicant admits from the statements above that VAA enables simultaneous viewing of television programs and videophone signals, however, applicant goes on to say there is no explanation to how the VAA processes these signals. Furthermore, applicants own specification shows Headend 110 transmitting TV signals and videophone signals over an HFC network 120 (see fig.1 and page 7+ of applicant's specification)

As to claim 41, applicant further argues that, "Burke reference does not discloses a first and second display device.

In response, Examiner disagrees. Examiner notes applicant's arguments, however, Burke discloses in the various diagrams where the VAAs processes signals displaying these signals via multiple output video channels to videophone devices and television display units (figs.2-3 and 13-17, col.9, line 59-col.10, line 36, line 48-col.11, line 18, line 49-67, col.22, line 18+ and col.25, line 64-col.26, line 28).

Applicant further argues that, "... Burke does not teach a user interface for controlling television programs presented on the separate display devices..."

In response, Examiner disagrees. Examiner notes applicant's argue, however, Burke further discloses a user interface, which includes a user input device that enables a user to perform selections via an on-screen menu (col.17, line 39-col.18, line 1+).

Applicant's further argues that Burke's disclosed VAA is not capable of processing television signals and videophone signals.

In responses, Examiner disagrees as clearly discussed above.

Applicant further argues and traverses the obviousness rejections of Burke in view of Hendricks as to the claimed limitation "...compressed digitized television signal...."

In response, Examiner disagrees. Examiner notes applicant's arguments, however, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference, nor is it that the claimed invention must be expressly suggested in any one or all the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. In this case Burke discloses PS-105 (a headend) receiving digital signals via digital network 140 and analog or digital signals from CATV video services station 102, multiplexes, combines, encodes, etc., as a digital data stream via an HFC communication channel and provides videophone and TV services to VAA. Burke is silent to TV signals being compressed digital signals, a deficiency disclosed in Hendricks, i.e., a network controller or headend for a digital cable television delivery systems, which provides interactive services and streams compressed digitized television programs from cable headend 208 to various set top terminals via a digital communication medium. All references are in the same field of endeavor, i.e., a headend broadcasting system, as such combining the teaching of Burke in view of Hendricks would have been within the knowledge of one of ordinary skill in the art as well and appropriate motivation was given.

With respect to claim 13, applicant further argues that, "...Burkes does not disclose the use of Ethernet, wireless Ethernet, etc.

In response, Examiner disagrees. Examiner notes applicant's argues, however Burke further discloses linking videophone and TVs together by the user of Ethernet (col.10, lines 14-48 and col.21, lines 7-35).

In view of the above the rejection is proper and maintained as repeated below.

**This Office Action is made Final.**

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 10-14, 16, 37-47, 49-50, 54, 57-58, 60-62 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Burke et al (6,134,223)** in of **Hendricks et al (5,600,364)**.

As to claims 1-2, note the **Burke et al** reference figures 1 and 2, disclose videophone apparatus, method and system for audio and video conferencing and a videophone system, comprising:

the claimed "a cable television system headend..." is met by Primary Station (P-station) 105 and CATV Video Services (CATV) 102 (figs. 1-3, 13 and col. 3, line 58- col. 4, line 8 and lines 50-67), note that PS/CATV105/102 forms a Cable Television System (CATV) headend, operative to control the routing of videophone calls within a CATV system 100;

the claimed "a plurality of subscriber terminals connected to the headend via a transmission medium..." is met by Video Access Apparatus (Vid-AA) 110, 150, 750 or 850 (col. 4, lines 29-50), Vid-AA 110-850 is a subscriber terminal or a Cable Modem located indoor or outdoor of Subscriber Premises 109n and connects to PS/CATV 105/102, which provides CATV signals and compressed digitized videophone signals for video conference services, over Hybrid Fiber Coaxial Cable (HFC) 103 "a first transmission medium," note further that the A/V signal via PS/CATV 105/102, includes compressed digitized video telephony "videophone" signals generated from digital videophones (V-Phone) 700 and CATV television signals corresponding to respective television programs (col. 4, lines 50-67 and 11, lines 49-67), where the Vid-AA 110-850 identifies, selects, and receives the video telephony signals and the CATV or television signals (col. 6, lines 24-50); note that Vid-AA 110-850 provides PIP functions, for multiple, simultaneous video conference from more than one location, and also provides simultaneous viewing of a movie or video signals received from a CATV network and a small window of the video from a video camera of V-Phone on TV 225 or 240 (col. 4, lines 8-17 and col. 11, lines 61-67);

the claimed "a videophone terminal operationally connected to one of said subscriber terminals..." is met by Videophone Apparatuses (V-Phone) 700n (figs. 3, 13 and col. 21, lines 7-35 and line 36+), note that Vid-AA 110-850 is connected to V-Phone 700 via coaxial communication medium "a second transmission medium" that is different from HFC 103 and adapted to transmit/receive compressed digitized videophone signals to/from Vid-AA 110-850 and where V-Phone 700 is further adapted



to produce and transmit a second compressed digitized video signal of the user of V-Phone 700, captured by 720 (identical to Camera 230, figs. 2-3), transmit to Vid-AA 110-850 via coaxial cable communication medium 227;

the claimed "a camera associated with said videophone unit..." is met by Camera 230 or 720 (figs. 14, 15, col. 7, line 61-col. 8, line 7 and col. 22, lines 30-50) which is associated with V-Phone 700, for capturing video images to V-Phone 700, the V-Phone being adapted to produce the second compressed digitized videophone signal from the video images; and

the claimed "at least one display device associated with the first videophone terminal..." is met by V-Phone 700 display Monitor 715 (fig. 14 and col. 22, lines 42-50) which displays at least a portion of a decompressed video signal corresponding to the first compressed digitized video signal received via Hybrid Fiber Coaxial Cable (HFC) 103 of the CATV system and user premises coaxial cable 227.

Burke, teaches utilizing multiple protocols to transmit/receive signals and simultaneously displays video from CATV and PIP video from camera of V-Phone and suggests the use of other video formats such as SECAM, HDTV, etc. (col. 10, line 43-col. 11, line 12), but fails to explicitly teach where the CATV signals includes compressed digitized television signals corresponding to respective television programs.

However, note **Hendricks** reference figures 1 and 5, discloses network controller for a digital cable television delivery systems, which provides interactive services and streams compressed digitized television programs from cable headend 208 to various

set top terminals via a digital communication medium (col. 7, lines 17-39, line 59-col. 8, line 2, col. 9, line 39-53 and col. 10, lines 34-57).

Therefore it would have been obvious to one of ordinary skill in at the time of the invention incorporate the teaching of Hendricks into the system of Burke to provide HDTV services to users.

As to claim 10, Burke further discloses where the V-AA 110-850 further is adapted to receive a signal from a remote control unit (RCU) responsive to providing the notification, a signal from the RCU corresponding to input from a user, the input from the user corresponding to an acceptance or declination of the incoming V-Phone call (col. 17, line 39-col. 18, line 5).

As to claim 11, Burke further discloses where P-Station 105/102 is coupled to PSTN or ISDN 140 via a high digital network to enable the compressed digitized videophone signals to be transported between PS/CATV 105/102 and remote network 140 (col. 4, lines 46-67).

As to claim 12, Burke further discloses where a plurality of V-Phone 700n is connected to V-AA 750 via coaxial cable 227 (fig. 13 and col. 21, lines 7-19).

As to claim 13, Burke further discloses where V-Phone 700n is connected to V-AA 750 by POTS twisted pair cabling arrangement (fig. 13 and col. 21, lines 7-19).

As to claim 14, Burke further discloses V-Phone 700n where coaxial cable or twisted pair is a LAN (fig. 13 and col. 21, lines 7-19).

As to claim 16, Burke further discloses where the P-Station 105/102 is adapted to receive the second compressed digitized videophone signal from the first videophone

terminal in a first format over HFC and convert the second compressed digitized videophone signal from the first format to a second format, PS/CATV 105/102 further adapted to transmit the second compressed digitized videophone signal in the second format to a second videophone terminal where the second format is different from the first format (col. 5, lines 31-52, col. 6, lines 10-50 and col. 21, line 60-col. 22, line 17), note that PS/CATV 105/102 uses Cable Access Signaling (CACS) using TDM for downstream, TDMA for upstream, and converts from one protocol to the other and reformats the data to appropriate network signal.

As to claim 37, note the **Burke et al** reference figures 1 and 2, disclose videophone apparatus, method and system for audio and video conferencing and a videophone system, comprising:

the claimed "a cable television system headend..." is met by Primary Station (P-station) 105 and CATV Video Services (CATV) 102 (figs. 1-3, 13 and col. 3, line 58-col. 4, line 8 and lines 50-67), note that PS/CATV 105/102 forms a Cable Television System (CATV) headend, operative to control the routing of videophone calls within a CATV system 100;

the claimed "a plurality of set-top terminals connected to the headend via a transmission medium..." is met by Video Access Apparatus (Vid-AA) 110, 150, 750 or 850 (col. 4, lines 29-50), Vid-AA 110-850 is "a set-top terminal" or a Cable Modem located indoor or outdoor of Subscriber Premises 109n and connects to PS/CATV 105/102, which provides CATV signals and compressed digitized videophone signals for video conference services, over Hybrid Fiber Coaxial Cable (HFC) 103 "a first

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transmission medium,” note that the A/V signals via PS/CATV 105/102, includes compressed digitized video telephony “videophone” signals generated from digital videophones (V-Phone) 700 and CATV television signals corresponding to respective television programs (col. 4, lines 50-67 and 11, lines 49-67), where the Vid-AA 110-850 “a first set-top terminal in the plurality of set-top terminals being adapted to: identifies, selects, and receives the video telephony signals and the CATV or television signals responsive to user input with a first control device (col. 6, lines 24-50); note that Vid-AA 110-850 provides PIP functions, for multiple, simultaneous video conference form more than one location, and also provides simultaneous viewing of a movie or video signals received from a CATV network and a small window of the video from a video camera of V-Phone on TV 225 or 240 (col. 4, lines 8-17 and col. 11, lines 61-67);

the claimed “a first videophone unit operationally connected to the first set-top terminal...” is met by Videophone Apparatuses (V-Phone) 700n (figs. 3, 13 and col. 21, lines 7-35 and line 36+), note that Vid-AA 110-850 is connected to V-Phone 700 via coaxial communication medium “a second transmission medium” that is different from HFC 103 and transmits/receives compressed digitized videophone signals to/from Vid-AA 110-850 and where V-Phone 700 is further adapted to produce and transmit a second compressed digitized video signal of the user of V-Phone 700, captured by 720 (identical to Camera 230, figs. 2-3), transmits to Vid-AA 110-850 via coaxial cable communication medium 227 and where the Vid-AA 110-850 further transmits the videophone signals over HFC 103; and

the claimed "a camera associated with said videophone unit..." is met by Camera 230 or 720 (figs. 14, 15, col. 7, line 61-col. 8, line 7 and col. 22, lines 30-50) which is associated with V-Phone 700, for capturing video images to V-Phone 700, the V-Phone being adapted to produce the second compressed digitized videophone signal from the video images.

Burke, teaches utilizing multiple protocols to transmit/receive signals and simultaneously displays video from CATV and PIP video from camera of V-Phone and suggests the use of other video formats such as SECAM, HDTV, etc. (col. 10, line 43-col. 11, line 12), but fails to explicitly teach where the CATV signals includes compressed digitized television signals corresponding to respective television programs.

However, note **Hendricks** reference figures 1 and 5, discloses network controller for a digital cable television delivery systems, which provides interactive services and streams compressed digitized television programs from cable headend 208 to various set top terminals via a digital communication medium (col. 7, lines 17-39, line 59-col. 8, line 2, col. 9, line 39-53 and col. 10, lines 34-57).

Therefore it would have been obvious to one of ordinary skill in at the time of the invention incorporate the teaching of Hendricks into the system of Burke to provide HDTV services to users.

As to claim 38, Burke further discloses where the output of Vid-AA 110-850 to TV 225 or 240 is over a coaxial cable 227 medium within the user premises and where Camera 720 provides video images to V-Phone 700 over an internal bus transmission

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medium different from coaxial cable 227 (col. 7, lines 42-50 and col. 21, line 7-col. 22, line 1+).

As to claim 39, Burke further discloses where the V-Phone can be integrated in Vid-AA 110-850 as a unit (col. 21, line 36-col. 22, line 1+ and col. 27, line 49-col. 28, line 1).

Claim 40 is met as previously discussed with respect to claim 12.

As to claims 41 and 42, note the **Burke et al** reference figures 1 and 2, disclose videophone apparatus, method and system for audio and video conferencing and telephony and further disclose a cable television system including a cable television system headend, the cable television system headend is operative to control the routing of videophone calls within the cable television system, a videophone system comprising the following:

the claimed "cable modem connected to said headend via a transmission medium..." is met by Video Access Apparatus (Vid-AA) 110, 150, 750 or 850 (col. 4, lines 29-50), Vid-AA 110-850, is a cable modem which is adapted to transmit and receive Audio/Video data, which includes CATV signals and compressed digitized videophone signal "packetized digital data," via PS/CAV 105/102 via Hybrid Fiber Coaxial Cable (HFC) 103 "first transmission medium," the compressed digitized video signals electrically address to at least V-Phone unit 700 and television signals for display different than the compressed digitized videophone signals (col. 4, lines 50-67 and col. 21, line 7-col. 22, line 1+), where Vid-AA 110-850 is adapted to identify, select, transmit, and receive the compressed digitized videophone signals and the CATV

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signals (col. 6, lines 24-50); note that Vid-AA 110-850 provides PIP functions, for multiple, simultaneous video conference from more than one location, and also provides simultaneous viewing of a movie or video signals received from a CATV network and a small window of the video from a video camera of V-Phone on TV 225 or 240 (col. 4, lines 8-17 and col. 11, lines 61-67);

the claimed "one first videophone unit operationally connected to the first set-top terminal..." is met by Videophone Apparatuses (V-Phone) 700n (figs. 3, 13 and col. 21, lines 7-35 and line 36+), note that Vid-AA 110-850 is connected to V-Phone 700 via coaxial communication medium "a second transmission medium" that is different from HFC 103 and transmits/receives compressed digitized videophone signals to/from Vid-AA 110-850 and where V-Phone 700 is further adapted to produce and transmit a second compressed digitized video signal of the user of V-Phone 700, captured by 720 (identical to Camera 230, figs. 2-3), transmits to Vid-AA 110-850 via coaxial cable communication medium 227 and where the Vid-AA 110-850 further transmits the videophone signals over HFC 103; and

the claimed "a camera associated with said videophone unit..." is met by Camera 230 or 720 (figs. 14, 15, col. 7, line 61-col. 8, line 7 and col. 22, lines 30-50) which is associated with V-Phone 700, for capturing video images to V-Phone 700, the V-Phone being adapted to produce the second compressed digitized videophone signal from the video images.

the claimed "a first display device associated with the first videophone terminal..." is met by V-Phone 700 display Monitor 715 (fig. 14 and col. 22, lines 42-50)

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which displays at least a portion of a decompressed video signal corresponding to the first compressed digitized video signal received via Hybrid Fiber Coaxial Cable (HFC) 103 of the CATV system and user premises coaxial cable 227;

the claimed "a second display device for displaying at least a portion of a first digitized data..." is met by TV Display 225 or 240 (col. 11, lines 49-67), which displays a move or video received from CATV network.

Burke, teaches utilizing multiple protocols to transmit/receive signals and simultaneously displays video from CATV and video from camera of V-Phone and suggests the use of other video formats such as SECAM, HDTV, etc. (col. 10, line 43-col. 11, line 12), but fails to explicitly teach displaying a digital data different from the compressed digitized videophone data.

However, note **Hendricks** reference figures 1 and 5, discloses network controller for a digital cable television delivery systems, which provides interactive services and streams compressed digitized television programs, which includes MPEG formatted data, from cable headend 208 to various set top terminals via a digital communication medium (col. 7, lines 17-39, line 59-col. 8, line 2, col. 9, line 39-53 and col. 10, lines 34-57).

Therefore it would have been obvious to one of ordinary skill in at the time of the invention incorporate the teaching of Hendricks into the system of Burke to provide HDTV services to users.

Claim 43 is met as previously discussed with respect to claim 13.

Claim 44 is met as previously discussed with respect to claim 9.



As to claim 45, Burke further discloses where coaxial cable transmission medium between the V-Phone and V-AA 110-850 comprises a wireless communication channel (col. 15, lines 9-22).

As to claims 46 and 50, note the **Burke et al** reference figures 1 and 2, disclose videophone apparatus, method and system for audio and video conferencing and telephony and further disclose a cable television system, including a headend, a plurality of subscriber terminals and a first telephone unit, a method for transporting compressed digitized videophone signals and compressed digitized television signals corresponding to respective television programs as a multiplexed packetized cable television signal over a cable television system, comprising the steps of:

the claimed "a first compressed digitized video signal from the first videophone unit to a first subscriber terminal..." is met by Videophone (V-Phone) 700 (figs. 3, 13, col. 21, lines 7-27), which transmits outgoing videophone signals "a first compressed digitized video signal" from V-Phone 700-1 "first videophone unit" to Video Access Apparatus (V-AA) 110, 150, 750 or 850 "subscriber terminal" over coaxial cable 227 "a second transmission medium," operationally connected to V-Phone 700 and V-AA 110, 150 or 850 (col. 21, lines 36-67), note that V-AA 750 similar to V-AA 110, 150 or 850 discussed in figs 3-16;

the claimed "transmitting the first compressed digitized videophone signal from the first subscriber terminal..." is met by V-AA 110-850, (figs. 3, 6, col. 10, lines 44-61, col. 13, line 62-col. 14, line 10 and lines 38-48), note that V-AA 110-850 includes Audio/Video Compression and Decompression Subsystem (A/V Subsystem) 265, which

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further includes DSP 365 and an Encoder 375 (fig. 6 and col. 14, lines 5-10), and when used for video conferencing and other bi-directional communications, V-AA 110-850 encodes the outgoing compressed digitized videophone signals and combines the encoded outgoing compressed digitized videophone signals with the cable television signal, transmits the cable television signal from V-AA 110-850 to Primary Station (P-station) 105 and CATV 102 over HFC "a first communication medium" different than the coaxial cable 227 at the subscriber premises (figs. 1, 13 and col. 3, line 58-col. 4, line 8), where Cable Television System (CATV) (PS/CATV 105/102) "a headend," (includes Combiner 104, Control Unit (CCU) and Communication Controller 115), receives, processes and routes the cable television signal based on packet identification (col. 5, lines 31-52 and col. 7, lines 15-24), and routes the outgoing videophone data to a second V-Phone unit "a second electronic address" different than first videophone of the first subscriber on the Network, PS/CATV 105/102 further receives a second compressed digitized videophone signal at the second address packetizes and processes the compressed v-phone signal based on packetized identification (col. 10, lines 44-68, col. 11, lines 13-23 and col. 21, lines 53-68); and

PS/CATV 105/102 and its various elements, further receives, processes and routes incoming videophone signals from the second V-Phone Unit on the network, packetizes and transmits the incoming videophone signals to V-AA 110-850, which receives and decodes the incoming videophone data (col. 7, line 53-col. 8, line 7, lines 26-50, col. 21, line 7-col. 22, line 1+ and col. 23, lines 36-59), which meets the claimed limitations "transmitting form the headend..." "receiving at the first subscriber

terminal..." transmitting the second compressed digitized..." and "outputting by the first subscriber terminal..." note that the video conferencing teaching discussed in figs. 3-9 is identical to the videophone conference discussed in figs 13-16.

Burke, teaches utilizing multiple protocols to transmit/receive signals and simultaneously displays video from CATV and PIP video from camera of V-Phone and suggests the use of other video formats such as SECAM, HDTV, etc. (col. 10, line 43-col. 11, line 12), but fails to explicitly teach where the CATV signals includes compressed digitized television signals corresponding to respective television programs.

However, note **Hendricks** reference figures 1 and 5, discloses network controller for a digital cable television delivery systems, which provides interactive services and streams compressed digitized television programs from cable headend 208 to various set top terminals via a digital communication medium (col. 7, lines 17-39, line 59-col. 8, line 2, col. 9, line 39-53 and col. 10, lines 34-57).

Therefore it would have been obvious to one of ordinary skill in at the time of the invention incorporate the teaching of Hendricks into the system of Burke to provide HDTV services to users.

As to claims 47 and 49, Burke further discloses where V-AA 110-850 outputting, at least a portion of the incoming decompressed digitized videophone signal, to Display 225, 240 or Video Monitor 715 "display device" (figs. 3, 14, col. 9, line 11-21, col. 10, line 14-35, col. 11, lines 61-67 and col. 22, lines 42-55), note the multiple digitized video of the camera can be display (col. 4, line 9-16 and col. 27, lines 49-60).

As to claim 54, Burke fails to explicitly teach where the headend assesses a billing charge to V-AA 110-850.

However, **Hendricks** further teaches creating billing records (col. 10, line 58-col. 11, line 9, lines 25-44 and col. 39, line 55-col. 40, line 1+).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Hendricks into the system of Burke to store billing information of each videophone user, and bill each user according for a time or duration spent on the V-Phone.

Claim 57 is met as previously discussed with respect to claim 1.

As to claim 58, Burke further discloses where the CATV signal further includes analog video signal corresponding to respective TV programs and V-AA 110-850 are further adapted to receive the analog video signals and provide the viewer with a portion of the television pictures corresponding to the analog television signals (col. 11, lines 49-67).

Claim 60 is met as previously discussed with respect to claim 38.

As to claim 61, Burke further discloses where Camera 720 is internal to V-Phone 700 (figs. 13-14 and col. 21, line 7+):

As to claim 61, Burke further discloses providing a notification of an incoming videophone call associated with the first compressed digitized videophone signal prior to receiving the first compressed digitized videophone signal (col. 17, line 39-col. 18, line 5).

Claim 65 is met as previously discussed with respect to claim 45.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3, is rejected under 35 U.S.C. 103(a) as being unpatentable over **Burke et al (6,134,223)** in view of **Hendricks et al (5,600,364)** as applied claim 1 above, and further in view of **Boursier et al (5,910,815)**.

As to claim 3, Burke as modified by Hendricks, teach a videophone with video camera, but fail to explicitly a videophone with a digital video camera.

However, note **Boursier et al** reference figure 1, discloses a videophone with a digital video camera (fig. 1 and col. 1, lines 28-44 and col. 2, line 66-col.3, line 25).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Boursier into the system of Burke as modified by Hendricks to provide a digital camera in the videophone for better quality images.

6. Claims 51 and 63-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Burke et al (6,134,223)** in view of **Hendricks et al (5,600,364)** as applied to claims 50 and 1 above, and further in view of **Sonesh et al (6,614,783)**.

As to claim 51, Burke as modified by Hendricks, fail to explicitly teach where the addresses are Internet Protocol addresses.

However, **Sonesh** teaches a distribution system, using Internet/PSTN call routing where addresses are IP addresses and identifies terminals based on their IP addresses (fig. 1 and col. 11, lines 13-22).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Sonesh into the system of Burke as modified by Hendricks to provide IP addresses and expand the network by offering Internet services which covers a WAN.

Claims 63-64 are met as previously discussed with respect to claim 51.

7. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Burke et al (6,134,223)** as applied to claim 1 above, and in view of **Kinney et al (5,808,662)**.

As to claim 66, Burke fails to explicitly teach where a second viewer is provided with a portion of television pictures corresponding to compressed digitized television signals.

However, note the **Kinney** reference figure 1, discloses interactive playback of digital movies across a network, which allows two or more participants that are operating on different playback systems at different locations to simultaneously view and control the playing of a movie (col.2, line 66-col.3, line 64).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of **Kinney** into the system of Burke to allow

multiple parties at different location to simultaneously watch a movie and also chat or debate on the movie.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

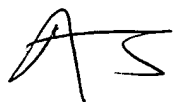
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC) at 866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative** or access to the automated information system, call **800-786-9199 (IN USA OR CANADA) or 571-272-1000**.



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